# NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

#### Federal Funds

#### SCIENCE

For necessary expenses, not otherwise provided for, in the conduct and support of science research and development activities, including research, development, operations, support, and services; maintenance and repair, facility planning and design; space flight, spacecraft control, and communications activities; program management; personnel and related costs, including uniforms or allowances therefor, as authorized by sections 5901 and 5902 of title 5, United States Code; travel expenses; purchase and hire of passenger motor vehicles; and purchase, lease, charter, maintenance, and operation of mission and administrative aircraft, \$7,988,300,000, to remain available until September 30, 2024.

Note.—A full-year 2022 appropriation for this account was not enacted at the time the Budget was prepared; therefore, the Budget assumes this account is operating under the Continuing Appropriations Act, 2022 (Division A of Public Law 117–43, as amended). The amounts included for 2022 reflect the annualized level provided by the continuing resolution.

#### Program and Financing (in millions of dollars)

Identif	ication code 080-0120-0-1-252	2021 actual	2022 est.	2023 est.
0001	Obligations by program activity: Science	7,099	7,301	7,988
	Budgetary resources:			
1000	Unobligated balance:	040	075	000
1000 1021	Unobligated balance brought forward, Oct 1 Recoveries of prior year unpaid obligations	640 37	875 57	932 57
	. ,			
10/0	Unobligated balance (total)	677	932	989
1100	Appropriations, discretionary: Appropriation	7.301	7,301	7,988
1120	Appropriations transferred to CECR [080–0130]	-4		
1160	Appropriation, discretionary (total)	7,297	7,301	7,988
1930	Total budgetary resources available	7,974	8,233	8,977
	Memorandum (non-add) entries:			
1941	Unexpired unobligated balance, end of year	875	932	989
	Change in obligated balance:			
2000	Unpaid obligations:	4 702	E 07E	4.052
3000 3010	Unpaid obligations, brought forward, Oct 1  New obligations, unexpired accounts	4,793 7.099	5,075 7,301	4,952 7,988
3011	Obligations ("upward adjustments"), expired accounts	7,033	7,501	7,300
3020	Outlays (gross)	-6,770	-7,367	-7.395
3040	Recoveries of prior year unpaid obligations, unexpired	-37	-57	-57
3041	Recoveries of prior year unpaid obligations, expired	-17		
3050	Unpaid obligations, end of year	5,075	4,952	5,488
	Memorandum (non-add) entries:			
3100	Obligated balance, start of year	4,793	5,075	4,952
3200	Obligated balance, end of year	5,075	4,952	5,488
	Budget authority and outlays, net:			
4000	Discretionary:	7.007	7.001	7.000
4000	Budget authority, gross Outlays, gross:	7,297	7,301	7,988
4010	Outlays from new discretionary authority	2,639	2,993	3,275
4011	Outlays from discretionary balances	4,131	4,374	4,120
4000	O., the	C 770	7.207	7 205
4020	Outlays, gross (total) Offsets against gross budget authority and outlays:	6,770	7,367	7,395
	Offsetting collections (collected) from:			
4030	Federal sources	-2		
4033	Non-Federal sources			
4040	Offsets against gross budget authority and outlays (total) Additional offsets against gross budget authority only:	-3		
4052	Offsetting collections credited to expired accounts	3		
4060	Additional offsets against budget authority only (total)	3		
4070	Budget authority, net (discretionary)	7,297	7.301	7,988
4080	Outlays, net (discretionary)	6,767	7,367	7,395
4180	Budget authority, net (total)	7,297	7,301	7,988
4190	Outlays, net (total)	6,767	7,367	7,395

The Science appropriation provides for NASA's science mission, which is comprised of the agency's Earth and space science programs: Earth Science, Planetary Science, Heliophysics, Biological and Physical Sciences,

and Astrophysics. These programs, which are managed by the Science Mission Directorate, focus on three interdisciplinary objectives: discovering the secrets of the Universe; searching for life in the Solar System and beyond; and safeguarding and improving life on Earth. These objectives include research concerning the global Earth system; other planets in the solar system and around other stars; the connections among the Sun, Earth, and heliosphere; and the origin and evolution of planetary systems, the galaxy, and the universe, including the origin and distribution of life in the universe. Program objectives are pursued through robotic flight missions, ground-based scientific research and data analysis, and the development of new technologies for future missions. Additionally, the Budget funds within Science a lunar robotic exploration program that will support innovative approaches to achieving human and science exploration goals.

The Science appropriation provides for all of the research, development, operations, salaries and related expenses, and other general and administrative activities required to execute the programs within this account. Costs include labor, travel, and procurement. Performance goals associated with these activities are addressed in NASA's detailed budget request.

#### Object Classification (in millions of dollars)

Identif	ication code 080-0120-0-1-252	2021 actual	2022 est.	2023 est.
	Direct obligations:			
	Personnel compensation:			
11.1	Full-time permanent	336	348	367
11.3	Other than full-time permanent	8	8	9
11.5	Other personnel compensation	1	1	1
11.9	Total personnel compensation	345	357	377
12.1	Civilian personnel benefits	121	126	132
21.0	Travel and transportation of persons	6	16	21
22.0	Transportation of things	16	16	18
23.2	Rental payments to others	8	8	8
23.3	Communications, utilities, and miscellaneous charges	9	9	10
24.0	Printing and reproduction	1	1	1
25.1	Advisory and assistance services	143	147	161
25.2	Other services from non-Federal sources	211	217	237
25.3	Other goods and services from Federal sources	260	267	293
25.4	Operation and maintenance of facilities	11	11	12
25.5	Research and development contracts	4,860	4,987	5,471
25.7	Operation and maintenance of equipment	66	68	74
26.0	Supplies and materials	29	30	33
31.0	Equipment	120	123	135
32.0	Land and structures	4	4	5
41.0	Grants, subsidies, and contributions	889	914	1,000
99.9	Total new obligations, unexpired accounts	7,099	7,301	7,988

#### **Employment Summary**

Identif	ication code 080-0120-0-1-252	2021 actual	2022 est.	2023 est.
1001	Direct civilian full-time equivalent employment	2,410	2,361	2,404

#### AERONAUTICS

For necessary expenses, not otherwise provided for, in the conduct and support of aeronautics research and development activities, including research, development, operations, support, and services; maintenance and repair, facility planning and design; space flight, spacecraft control, and communications activities; program management; personnel and related costs, including uniforms or allowances therefor, as authorized by sections 5901 and 5902 of title 5, United States Code; travel expenses; purchase and hire of passenger motor vehicles; and purchase, lease, charter, maintenance, and operation of mission and administrative aircraft, \$971,500,000, to remain available until September 30, 2024.

Note.—A full-year 2022 appropriation for this account was not enacted at the time the Budget was prepared; therefore, the Budget assumes this account is operating under the Continuing Appropriations Act, 2022 (Division A of Public Law 117–43, as amended). The amounts included for 2022 reflect the annualized level provided by the continuing resolution.

# AERONAUTICS—Continued Program and Financing (in millions of dollars)

Identif	ication code 080-0126-0-1-402	2021 actual	2022 est.	2023 est.
0001	Obligations by program activity: Aeronautics	845	829	972
	Dudastania			
	Budgetary resources: Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	29	20	32
1021	Recoveries of prior year unpaid obligations	7	12	12
1070	Unobligated balance (total)	36	32	44
	Budget authority:			
	Appropriations, discretionary:			
1100	Appropriation	829	829	972
1930	Total budgetary resources available	865	861	1,016
1941	Unexpired unobligated balance, end of year	20	32	44
	Change in obligated balance: Unpaid obligations:			
3000	Unpaid obligations, brought forward, Oct 1	358	430	439
3010	New obligations, unexpired accounts	845	829	972
3020	Outlays (gross)	-763	-808	-873
3040	Recoveries of prior year unpaid obligations, unexpired	-7	-12	-12
3041	Recoveries of prior year unpaid obligations, expired	-3		
3050	Unpaid obligations, end of year	430	439	526
	Memorandum (non-add) entries:			
3100	Obligated balance, start of year	358	430	439
3200	Obligated balance, end of year	430	439	526
	Budget authority and outlays, net:			
	Discretionary:			
4000	Budget authority, gross	829	829	972
	Outlays, gross:			
4010	Outlays from new discretionary authority	470	448	525
4011	Outlays from discretionary balances	293	360	348
4020	Outlays, gross (total)	763	808	873
4180	Budget authority, net (total)	829	829	972
4190	Outlays, net (total)	763	808	873

This appropriation provides for the full costs associated with NASA's Aeronautics Research mission, which aims to expand the boundaries of aeronautical knowledge for the benefit of the nation and the broad aeronautics community. The mission is managed by NASA's Aeronautics Research Mission Directorate, and consists of the following integrated research programs: Airspace Operations and Safety, Advanced Air Vehicles, Integrated Aviation Systems, Transformative Aeronautics Concepts, and Aerosciences Evaluation and Test Capabilities. Full costs of these programs include all labor, travel, procurement, test, and fabrication costs associated with the research, development, operations, and other general and administrative activities required to execute the programs. Performance goals associated with these activities are addressed in NASA's detailed budget request.

# $\textbf{Object Classification} \ (\text{in millions of dollars})$

Identif	fication code 080-0126-0-1-402	2021 actual	2022 est.	2023 est.
	Direct obligations:			
	Personnel compensation:			
11.1	Full-time permanent	178	181	202
11.3	Other than full-time permanent	6	6	7
11.9	Total personnel compensation	184	187	209
12.1	Civilian personnel benefits	65	66	74
21.0	Travel and transportation of persons	1	7	8
23.3	Communications, utilities, and miscellaneous charges	6	6	7
25.1	Advisory and assistance services	14	14	16
25.2	Other services from non-Federal sources	29	28	33
25.3	Other goods and services from Federal sources	7	7	8
25.4	Operation and maintenance of facilities	56	55	60
25.5	Research and development contracts	355	333	419
25.7	Operation and maintenance of equipment	42	41	43
26.0	Supplies and materials	9	9	10
31.0	Equipment	25	25	29
32.0	Land and structures	5	5	6
41.0	Grants, subsidies, and contributions	47	46	50

99.9	Total new obligations, unexpired accounts	845	829	972
	Employment Summary			
Identific	ation code 080-0126-0-1-402	2021 actual	2022 est.	2023 est.
1001	Direct civilian full-time equivalent employment	1,404	1,425	1,493

#### SPACE TECHNOLOGY

For necessary expenses, not otherwise provided for, in the conduct and support of space technology research and development activities, including research, development, operations, support, and services; maintenance and repair, facility planning and design; space flight, spacecraft control, and communications activities; program management; personnel and related costs, including uniforms or allowances therefor, as authorized by sections 5901 and 5902 of title 5, United States Code; travel expenses; purchase and hire of passenger motor vehicles; and purchase, lease, charter, maintenance, and operation of mission and administrative aircraft, \$1,437,900,000, to remain available until September 30, 2024.

Note.—A full-year 2022 appropriation for this account was not enacted at the time the Budget was prepared; therefore, the Budget assumes this account is operating under the Continuing Appropriations Act, 2022 (Division A of Public Law 117–43, as amended). The amounts included for 2022 reflect the annualized level provided by the continuing resolution.

#### Program and Financing (in millions of dollars)

2021 actual

2022 est.

2023 est.

Identification code 080-0131-0-1-252

0001	Obligations by program activity: Space Technology	1,174	1,100	1,438
	Budgetary resources:			
	Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	81	27	43
1021	Recoveries of prior year unpaid obligations	20	16	30
1070	Unobligated balance (total)	101	43	73
	Budget authority:			
	Appropriations, discretionary:			
1100	Appropriation	1,100	1,100	1,438
1930	Total budgetary resources available	1,201	1,143	1,511
	Memorandum (non-add) entries:			
1941	Unexpired unobligated balance, end of year	27	43	73
	Change in obligated balance:			
2000	Unpaid obligations:	700	200	0.51
3000	Unpaid obligations, brought forward, Oct 1	723	806	851
3010	New obligations, unexpired accounts	1,174	1,100	1,438
3011	Obligations ("upward adjustments"), expired accounts	1 000	1 000	1.04
3020 3040	Outlays (gross)	-1,068	-1,039	-1,245 -30
	Recoveries of prior year unpaid obligations, unexpired	-20	-16	
3041	Recoveries of prior year unpaid obligations, expired			
3050	Unpaid obligations, end of year	806	851	1,014
	Memorandum (non-add) entries:			
3100	Obligated balance, start of year	723	806	851
3200	Obligated balance, end of year	806	851	1,014
	Budget authority and outlays, net:			
4000	Discretionary:	1 100	1 100	1 420
4000	Budget authority, gross	1,100	1,100	1,438
4010	Outlays, gross:	F01	472	C10
4010	Outlays from new discretionary authority	501	473	618
4011	Outlays from discretionary balances	567	566	627
4020	Outlays, gross (total)	1,068	1,039	1,245
	Offsets against gross budget authority and outlays:			
	Offsetting collections (collected) from:			
4033	Non-Federal sources	-1		
	Additional offsets against gross budget authority only:			
4052	Offsetting collections credited to expired accounts	1		
4070	Budget authority, net (discretionary)	1.100	1,100	1,438
4080	Outlays, net (discretionary)	1,100	1,039	1,245
4180	Budget authority, net (total)	1,1007	1,100	1,438
4190	Outlays, net (total)	1,100	1,100	1,436
4130	outlays, net (total)	1,007	1,033	1,24

This appropriation provides for the costs associated with research and development in space technologies serving multiple customers within NASA, private industry, academia, and other government agencies. The full costs provide for all of the research, development, operations, salaries and related expenses, and other general and administrative activities required to execute the programs within this account. Costs include labor, travel, procurement, and those associated with fabrication, tests and flight demonstrations.

The programs within the Space Technology account are dedicated to developing transformative, cross-cutting technologies that support NASA's missions and contribute towards commercial and other government agencies needs. The Space Technology appropriation funds several programs: Small Business Innovative Research (SBIR), Small Business Technology Transfer (STTR), Early Stage Innovation & Partnerships, Technology Maturation, and Technology Demonstrations.

#### Object Classification (in millions of dollars)

Identific	cation code 080-0131-0-1-252	2021 actual	2022 est.	2023 est.
	Direct obligations:			
	Personnel compensation:			
11.1	Full-time permanent	117	110	125
11.3	Other than full-time permanent	3	3	4
11.9	Total personnel compensation	120	113	129
12.1	Civilian personnel benefits	43	39	46
21.0	Travel and transportation of persons	1	3	19
22.0	Transportation of things	5	5	6
23.2	Rental payments to others	1	1	1
25.1	Advisory and assistance services	56	52	69
25.2	Other services from non-Federal sources	32	30	39
25.3	Other goods and services from Federal sources	46	43	56
25.4	Operation and maintenance of facilities	4	4	5
25.5	Research and development contracts	762	714	940
25.7	Operation and maintenance of equipment	9	8	11
26.0	Supplies and materials	8	7	10
31.0	Equipment	10	9	12
41.0	Grants, subsidies, and contributions	77	72	95
99.9	Total new obligations, unexpired accounts	1,174	1,100	1,438

#### **Employment Summary**

Identification code 080-0131-0-1-252	2021 actual	2022 est.	2023 est.
1001 Direct civilian full-time equivalent employment	911	880	921

#### DEEP SPACE EXPLORATION SYSTEMS

For necessary expenses, not otherwise provided for, in the conduct and support of exploration research and development activities, including research, development, operations, support, and services; maintenance and repair, facility planning and design; space flight, spacecraft control, and communications activities; program management; personnel and related costs, including uniforms or allowances therefor, as authorized by sections 5901 and 5902 of title 5, United States Code; travel expenses; purchase and hire of passenger motor vehicles; and purchase, lease, charter, maintenance, and operation of mission and administrative aircraft, \$7,478,283,000, to remain available until September 30, 2024.

Note.—A full-year 2022 appropriation for this account was not enacted at the time the Budget was prepared; therefore, the Budget assumes this account is operating under the Continuing Appropriations Act, 2022 (Division A of Public Law 117–43, as amended). The amounts included for 2022 reflect the annualized level provided by the continuing resolution.

# $\label{eq:program} \textbf{Program and Financing} \ \ (\text{in millions of dollars})$

Identif	ication code 080–0124–0–1–252	2021 actual	2022 est.	2023 est.
0001	Obligations by program activity:  Deep Space Exploration Systems	6,589	6,578	7,478
	Budgetary resources: Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	198	161	294
1011	Unobligated balance transfer from CECR [080-0130]	7		
1021	Recoveries of prior year unpaid obligations	33	133	133
1070	Unobligated balance (total)	238	294	427
1100	Appropriation	6,556	6,555	7,478

1930   Total budgetary resources available   6,750   6,872   7	1120 1121	Appropriations transferred to CECR [080-0130]	_44 	-25 48	
1930   Total budgetary resources available   6,750   6,872   7	1160	Appropriation, discretionary (total)	6.512	6.578	7,478
Change in obligated balance:           Unpaid obligations.         2,692         3,015         2           3010         Unpaid obligations, brought forward, Oct 1         2,692         3,015         2           3010         New obligations, unexpired accounts         6,589         6,578         7           3011         Obligations ("upward adjustments"), expired accounts         3            3020         Outlays (gross)         -6,231         -6,467         -7           3040         Recoveries of prior year unpaid obligations, unexpired         -33         -133         -133         -3           3041         Recoveries of prior year unpaid obligations, expired         -5             3050         Unpaid obligations, end of year         3,015         2,993         3           3100         Obligated balance, start of year         2,692         3,015         2           3200         Obligated balance, end of year         2,692         3,015         2,993         3           Budget authority and outlays, net:           Discretionary:         0utlays, gross:         6,512         6,578         7           4010         Outlays, from new discretionary authority         3,691         3,753	1930	Total budgetary resources available			7,905
Unpaid obligations:   2,692   3,015   3   3,015   3,015   3,015   3,015   3,015   3,015   3,015   3,	1941	Unexpired unobligated balance, end of year	161	294	427
3010   New obligations, unexpired accounts   6,589   6,578   7					
3011   Obligations ("upward adjustments"), expired accounts   3   3020   0utlays (gross)   -6,231   -6,467   -7   3040   Recoveries of prior year unpaid obligations, unexpired   -33   -133   -3   3041   Recoveries of prior year unpaid obligations, expired   -5   -5   3050   Unpaid obligations, end of year   3,015   2,993   3   Memorandum (non-add) entries:   3100   Obligated balance, start of year   2,692   3,015   2   3200   Obligated balance, end of year   3,015   2,993   3   3   3   3   3   3   3   3   3	3000		2,692	3,015	2,993
3020 Outlays (gross)	3010			6,578	7,478
3040   Recoveries of prior year unpaid obligations, unexpired   -33   -133   -3041   Recoveries of prior year unpaid obligations, expired   -5   -5   -3050     -5   -5   -3050     -3050   Unpaid obligations, end of year   -3050   Unpaid obligations, end of year   -3050   -305			-		
Recoveries of prior year unpaid obligations, expired				-, -	-7,177
3050   Unpaid obligations, end of year			-33	-133	-133
Memorandum (non-add) entries:	3041	Recoveries of prior year unpaid obligations, expired			
3100   Obligated balance, start of year	3050		3,015	2,993	3,161
Budget authority and outlays, net:   Discretionary:   4000   Budget authority, gross	3100		2.692	3.015	2,993
Discretionary:   4000   Budget authority, gross   6,512   6,578   7	3200		,		3,161
Outlays, gross:   4010   Outlays from new discretionary authority   3,691   3,753   4   4011   Outlays from discretionary balances   2,540   2,714   2   2   2   2   2   2   2   2   2					
4011 Outlays from discretionary balances	4000	5 7,5	6,512	6,578	7,478
4020 Outlays, gross (total)	4010	Outlays from new discretionary authority	3,691	3,753	4,262
Offsets against gross budget authority and outlays: Offsetting collections (collected) from: 4033 Non-Federal sources	4011	Outlays from discretionary balances	2,540	2,714	2,915
4033 Non-Federal sources	4020	Offsets against gross budget authority and outlays:	6,231	6,467	7,177
	4033	Non-Federal sources	-2		
	4052		2		
4070 Budget authority, net (discretionary)	4070	Budget authority, net (discretionary)	6,512	6,578	7,478
4080 Outlays, net (discretionary)	4080	Outlays, net (discretionary)	6,229	6,467	7,177
4180 Budget authority, net (total)	4180	Budget authority, net (total)	6,512	6,578	7,478
4190 Outlays, net (total)	4190	Outlays, net (total)	6,229	6,467	7,177

This appropriation provides for costs associated with the development of systems and capabilities required for human exploration of space. The capabilities include launch and crew vehicles for missions beyond low Earth orbit; providing integrated systems to keep astronauts safe, healthy, and functional during deep space missions; and advancing the tools to increase exploration capabilities and reduce the launch mass and cost of deep space missions. The full costs provide for the research, development, operations, salaries and related expenses, and other general and administrative activities required to execute the programs within this account. Costs include labor, travel, procurement, test, and fabrication costs. Major themes within the Deep Space Exploration Systems account include Common Exploration Systems Development, Artemis Campaign Development, Mars Campaign Development, and Human Exploration Requirements & Architecture and Mars. Performance goals associated with these activities are addressed in NASA's detailed budget request.

The Common Exploration Systems Development theme is comprised of NASA's human deep space exploration programs which include the Space Launch System, Orion, and Exploration Ground Systems. The objective of the theme is to design, develop, test, and evaluate the initial vehicles in these programs and any follow-on development projects needed to enhance the vehicles.

The Artemis Campaign Development theme is comprised of the Gateway, Advanced Cislunar and Surface Capabilities, the Human Lander System, and the xEVA and Surface Mobility Program. These programs are developing the systems that will enable humans to live and operate on and near the Moon in the Artemis campaign.

The Mars Campaign Development theme consists of the Exploration Capabilities Program. This program is investigating new technologies that will be needed in a system to carry humans to Mars.

# Object Classification (in millions of dollars)

Identific	cation code 080-0124-0-1-252	2021 actual	2022 est.	2023 est.
	Direct obligations:			
	Personnel compensation:			
11.1	Full-time permanent	390	431	355

# DEEP SPACE EXPLORATION SYSTEMS—Continued Object Classification—Continued

Identific	cation code 080-0124-0-1-252	2021 actual	2022 est.	2023 est.
11.3	Other than full-time permanent	4	4	5
11.5	Other personnel compensation	3	3	3
11.8	Special personal services payments	1	1	1
11.9	Total personnel compensation	398	439	364
12.1	Civilian personnel benefits	143	154	128
21.0	Travel and transportation of persons	3	15	13
23.3	Communications, utilities, and miscellaneous charges	13	13	15
25.1	Advisory and assistance services	394	390	447
25.2	Other services from non-Federal sources	35	35	40
25.3	Other goods and services from Federal sources	23	23	26
25.4	Operation and maintenance of facilities	120	119	136
25.5	Research and development contracts	4,830	4,765	5,594
25.7	Operation and maintenance of equipment	86	85	98
26.0	Supplies and materials	32	32	36
31.0	Equipment	370	367	420
32.0	Land and structures	96	95	109
41.0	Grants, subsidies, and contributions	46	46	52
99.9	Total new obligations, unexpired accounts	6,589	6,578	7,478

#### **Employment Summary**

Identification code 080-0124-0-1-252		2022 est.	2023 est.
1001 Direct civilian full-time equivalent employment	2,927	3,212	2,704

#### SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS ENGAGEMENT

For necessary expenses, not otherwise provided for, in the conduct and support of aerospace and aeronautical education research and development activities, including research, development, operations, support, and services; program management; personnel and related costs, including uniforms or allowances therefor, as authorized by sections 5901 and 5902 of title 5, United States Code; travel expenses; purchase and hire of passenger motor vehicles; and purchase, lease, charter, maintenance, and operation of mission and administrative aircraft, \$150,100,000, to remain available until September 30, 2024.

Note.—A full-year 2022 appropriation for this account was not enacted at the time the Budget was prepared; therefore, the Budget assumes this account is operating under the Continuing Appropriations Act, 2022 (Division A of Public Law 117–43, as amended). The amounts included for 2022 reflect the annualized level provided by the continuing resolution.

## Program and Financing (in millions of dollars)

ldentif	ication code 080-0128-0-1-252	2021 actual	2022 est.	2023 est.
0001	Obligations by program activity: STEM Engagement	129	127	150
	Budgetary resources:			
1000	Unobligated balance:	10	0	1/
1000 1021	Unobligated balance brought forward, Oct 1	10	8	10
1021	Recoveries of prior year unpaid obligations			
1070	Unobligated balance (total)	10	10	12
	Budget authority:			
	Appropriations, discretionary:			
1100	Appropriation	127	127	150
1930	Total budgetary resources available	137	137	162
	Memorandum (non-add) entries:			
1941	Unexpired unobligated balance, end of year	8	10	12
	Change in obligated balance: Unpaid obligations:			
3000	Unpaid obligations, brought forward, Oct 1	161	172	180
3010	New obligations, unexpired accounts	129	127	150
3020	Outlays (gross)	-117	-117	-131
3040	Recoveries of prior year unpaid obligations, unexpired		-2	-2
3041	Recoveries of prior year unpaid obligations, expired			
3050	Unpaid obligations, end of year	172	180	197
	Memorandum (non-add) entries:			
3100	Obligated balance, start of year	161	172	180
3200	Obligated balance, end of year	172	180	197

	Budget authority and outlays, net: Discretionary:			
4000	Budget authority, gross	127	127	150
	Outlays, gross:			
4010	Outlays from new discretionary authority	15	17	20
4011	Outlays from discretionary balances	102	100	111
4020	Outlays, gross (total)	117	117	131
	Budget authority, net (total)	127	127	150
			127	
4190	Outlays, net (total)	117	117	131

This appropriation provides for costs associated with the Office of Science, Technology, Engineering, and Mathematics (STEM) Engagement. This includes support for the following projects: the Minority University Research and Education Project (MUREP), to broaden participation in engineering and other STEM fields; Space Grant, which funds education and research projects through a national network of university-based consortia; Next Gen STEM, which reaches K-12 students and provides competitive awards for informal educational institutions and sustains a national network of museums and science centers; and the Established Program to Stimulate Competitive Research (EPSCoR), which provides cooperative agreement opportunities designed to establish partnerships between government, higher education, and industry in an effort to build stronger research and development capabilities in 28 eligible EPSCoR jurisdictions. NASA will expand its efforts to broaden diversity and inclusion in STEM, including working with partner organizations to attract and retain underrepresented students in STEM fields and providing greater access to NASA STEM learning opportunities. Performance goals associated with these activities are addressed in NASA's detailed budget request.

### Object Classification (in millions of dollars)

Identific	cation code 080-0128-0-1-252	2021 actual	2022 est.	2023 est.
11.1	Direct obligations: Personnel compensation: Full-time permanent	5	6	7
11.9	Total personnel compensation	5	6	7
12.1	Civilian personnel benefits	2	3	3
21.0	Travel and transportation of persons		1	1
25.1	Advisory and assistance services	1	1	1
25.2	Other services from non-Federal sources	4	4	5
25.5	Research and development contracts	8	8	9
25.7	Operation and maintenance of equipment	5	5	6
31.0	Equipment	3	3	3
41.0	Grants, subsidies, and contributions	101	96	115
99.9	Total new obligations, unexpired accounts	129	127	150

# **Employment Summary**

Identification code 080-0128-0-1-252	2021 actual	2022 est.	2023 est.
1001 Direct civilian full-time equivalent employment	41	45	55

## SAFETY, SECURITY AND MISSION SERVICES

For necessary expenses, not otherwise provided for, in the conduct and support of science, aeronautics, space technology, exploration, space operations and education research and development activities, including research, development, operations, support, and services; maintenance and repair, facility planning and design; space flight, spacecraft control, and communications activities; program management; personnel and related costs, including uniforms or allowances therefor, as authorized by sections 5901 and 5902 of title 5, United States Code; travel expenses; purchase and hire of zero emission passenger motor vehicles and supporting charging or fueling infrastructure; not to exceed \$63,000 for official reception and representation expenses; and purchase, lease, charter, maintenance, and operation of mission and administrative aircraft, \$3,208,700,000, to remain available until September 30, 2024.

Note.—A full-year 2022 appropriation for this account was not enacted at the time the Budget was prepared; therefore, the Budget assumes this account is operating under the Continuing Appropriations Act, 2022 (Division A of Public Law 117–43, as amended). The amounts included for 2022 reflect the annualized level provided by the continuing resolution.

### Program and Financing (in millions of dollars)

iueiitii	ication code 080-0122-0-1-252	2021 actual	2022 est.	2023 est.
	Obligations by program activity:			
0001	Safety, Security and Mission Services	3,025	2,937	3,209
0801	Cross Agency Support (Reimbursable)	1,463	1,671	1,458
0900	Total new obligations, unexpired accounts	4,488	4,608	4,667
	Budgetary resources: Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	941	763	891
1021	Recoveries of prior year unpaid obligations	41	128	48
1070	Unobligated balance (total)	982	891	939
1070	Budget authority:	302	031	333
	Appropriations, discretionary:			
1100	Appropriation	2,937	2,937	3,209
	Spending authority from offsetting collections, discretionary:	,	,	.,
1700	Collected	1,342	1,671	1,458
1701	Change in uncollected payments, Federal sources	-10		
1750	Spending auth from offsetting collections, disc (total)	1,332	1,671	1,458
1900	Budget authority (total)	4,269	4,608	4,667
	Total budgetary resources available	5,251	5,499	5,606
	Memorandum (non-add) entries:	-, -	.,	.,
1941	Unexpired unobligated balance, end of year	763	891	939
	Change in obligated balance:			
	Unpaid obligations:			
3000	Unpaid obligations, brought forward, Oct 1	2,167	2,075	1,719
3010	New obligations, unexpired accounts	4,488	4,608	4,667
3011	Obligations ("upward adjustments"), expired accounts	8		
3020	Outlays (gross)	-4,534	-4,836	-4,802
3040 3041	Recoveries of prior year unpaid obligations, unexpired	-41 -13	-128	-48
3041	Recoveries of prior year unpaid obligations, expired	-13		<del></del>
3050	Unpaid obligations, end of year Uncollected payments:	2,075	1,719	1,536
3060	Uncollected pymts, Fed sources, brought forward, Oct 1	-1,867	-1,687	-1,687
3070	Change in uncollected pymts, Fed sources, unexpired	10		
3071	Change in uncollected pymts, Fed sources, expired	170	<u></u>	
3090	Uncollected pymts, Fed sources, end of year	-1,687	-1,687	-1,687
	Memorandum (non-add) entries:			
3100	Obligated balance, start of year	300	388	32
3200	Obligated balance, end of year	388	32	-151
	Budget authority and outlays, net:			
4000	Discretionary: Budget authority, gross	4,269	4,608	4,667
4000	Outlays, gross:	4,203	4,000	4,007
4010	Outlays from new discretionary authority	2,582	2,918	3,063
4011	Outlays from discretionary balances	1,952	1,918	1,739
		4.504	4.000	1.000
			4,836	4,802
4020	Outlays, gross (total)	4,534	4,000	,
4020	Offsets against gross budget authority and outlays:	4,534	4,000	,
	Offsets against gross budget authority and outlays: Offsetting collections (collected) from:			
4030	Offsets against gross budget authority and outlays: Offsetting collections (collected) from: Federal sources	-1,277	-1,208	-1,208
	Offsets against gross budget authority and outlays: Offsetting collections (collected) from:			
4030	Offsets against gross budget authority and outlays: Offsetting collections (collected) from: Federal sources Non-Federal sources Offsets against gross budget authority and outlays (total)	-1,277	-1,208	-1,208
4030 4033 4040	Offsets against gross budget authority and outlays: Offsetting collections (collected) from: Federal sources Non-Federal sources Offsets against gross budget authority and outlays (total) Additional offsets against gross budget authority only:	-1,277 -232 -1,509	-1,208 -463 -1,671	-1,208 -250 -1,458
4030 4033 4040 4050	Offsets against gross budget authority and outlays: Offsetting collections (collected) from: Federal sources	-1,277 -232 -1,509	-1,208 -463 -1,671	-1,208 -250 -1,458
4030 4033 4040	Offsets against gross budget authority and outlays: Offsetting collections (collected) from: Federal sources Non-Federal sources Offsets against gross budget authority and outlays (total) Additional offsets against gross budget authority only:	-1,277 -232 -1,509	-1,208 -463 -1,671	-1,208 -250 -1,458
4030 4033 4040 4050	Offsets against gross budget authority and outlays: Offsetting collections (collected) from: Federal sources	-1,277 -232 -1,509	-1,208 -463 -1,671	-1,208 -250 -1,458
4030 4033 4040 4050 4052 4060	Offsets against gross budget authority and outlays: Offsetting collections (collected) from: Federal sources	-1,277 -232 -1,509 10 167 177	-1,208 -463 -1,671	-1,208 -250 -1,458
4030 4033 4040 4050 4052 4060 4070	Offsets against gross budget authority and outlays: Offsetting collections (collected) from: Federal sources	-1,277 -232 -1,509 10 167 -177 2,937	-1,208 -463 -1,671 	-1,208 -250 -1,458 
4030 4033 4040 4050 4052 4060	Offsets against gross budget authority and outlays: Offsetting collections (collected) from: Federal sources	-1,277 -232 -1,509 10 167 177	-1,208 -463 -1,671	-1,208 -250 -1,458

Safety, Security, and Mission Services (SSMS) manages agency-wide mission support functions and some of NASA's research facilities. This appropriation provides for the operations and maintenance, salaries and related expenses, and other general and administrative activities that support all NASA's missions. SSMS programs, projects and activities fall under the two Themes described below. Performance goals associated with these activities are addressed in NASA's detailed budget request.

Mission Services and Capabilities (MSaC) delivers enterprise solutions through three programs: Information Technology; Mission Enabling Services; and Infrastructure and Technical Capabilities. These programs meet workforce, infrastructure, information technology and business operations

requirements necessary to enable NASA's mission. MSaC ensures that critical Agency operations across all NASA Centers are effective, efficient, safe, and meet statutory, regulatory, and fiduciary responsibilities.

Engineering, Safety, and Operations (ESO) provides for the ongoing management of NASA Headquarters, nine Centers, and component facilities. It funds medical and engineering technical authorities and contributes to the reduction of program risks by ensuring that technical skills and assets are ready and available to meet program and project requirements. ESO ensures that Center practices are technically and scientifically sound and that specialized infrastructure at the Centers is safe and reliable.

#### Object Classification (in millions of dollars)

Identi	fication code 080-0122-0-1-252	2021 actual	2022 est.	2023 est.
	Direct obligations:			
	Personnel compensation:			
11.1	Full-time permanent	912	944	999
11.3	Other than full-time permanent	22	22	23
11.5	Other personnel compensation	57	55	60
11.9	Total personnel compensation	991	1,021	1,082
12.1	Civilian personnel benefits	331	341	361
13.0	Benefits for former personnel	1	1	1
21.0	Travel and transportation of persons	2	17	13
22.0	Transportation of things	1	1	1
23.1	Rental payments to GSA	34	36	37
23.2	Rental payments to others	1	1	1
23.3	Communications, utilities, and miscellaneous charges	77	75	82
24.0	Printing and reproduction	2	2	2
25.1	Advisory and assistance services	392	382	415
25.2	Other services from non-Federal sources	235	129	196
25.3	Other goods and services from Federal sources	50	49	53
25.4	Operation and maintenance of facilities	235	228	249
25.5	Research and development contracts	171	166	181
25.6	Medical care	8	8	8
25.7	Operation and maintenance of equipment	281	272	299
26.0	Supplies and materials	14	14	15
31.0	Equipment	154	149	163
32.0	Land and structures	28	27	31
41.0	Grants, subsidies, and contributions	17	18	19
99.0	Direct obligations	3,025	2,937	3,209
99.0	Reimbursable obligations	1,463	1,671	1,458
99.9	Total new obligations, unexpired accounts	4,488	4,608	4,667

# **Employment Summary**

Identif	ication code 080-0122-0-1-252	2021 actual	2022 est.	2023 est.
	Direct civilian full-time equivalent employment	6,679 25	7,154 300	7,054 300

# CONSTRUCTION AND ENVIRONMENTAL COMPLIANCE AND RESTORATION

For necessary expenses for construction of facilities including repair, rehabilitation, revitalization, and modification of facilities, construction of new facilities and additions to existing facilities, facility planning and design, and restoration, and acquisition or condemnation of real property, as authorized by law, and environmental compliance and restoration, \$424,300,000, to remain available until September 30, 2028: Provided, That proceeds from leases deposited into this account shall be available for a period of 5 years to the extent and in amounts as provided in annual appropriations Acts: Provided further, That such proceeds referred to in the preceding proviso shall be available for obligation for fiscal year 2023 in an amount not to exceed \$25,000,000: Provided further, That each annual budget request shall include an annual estimate of gross receipts and collections and proposed use of all funds collected pursuant to section 20145 of title 51, United States Code.

Note.—A full-year 2022 appropriation for this account was not enacted at the time the Budget was prepared; therefore, the Budget assumes this account is operating under the Continuing Appropriations Act, 2022 (Division A of Public Law 117–43, as amended). The amounts included for 2022 reflect the annualized level provided by the continuing resolution.

# CONSTRUCTION AND ENVIRONMENTAL COMPLIANCE AND RESTORATION

# [(INCLUDING TRANSFER OF FUNDS)]

[For an additional amount for "Construction and Environmental Compliance and Restoration" for repair at National Aeronautics and Space Administration facilities damaged by Hurricanes Zeta and Ida, \$321,400,000, to remain available until expen-

CONSTRUCTION AND ENVIRONMENTAL COMPLIANCE AND RESTORATION—Continued ded: *Provided*, That up to 15 percent of such amount may be transferred to "Exploration" for necessary expenses related to flight hardware, tooling, production and schedule delays caused by Hurricane Ida: *Provided further*, That except as provided in the preceding proviso, the amounts appropriated under this heading in this Act shall not be available for transfer under any transfer authority provided for the National Aeronautics and Space Administration in an appropriation Act for fiscal year 2022.] (*Disaster Relief Supplemental Appropriations Act, 2022.*)

#### Program and Financing (in millions of dollars)

Identii	fication code 080-0130-0-1-252	2021 actual	2022 est.	2023 est.
0001	Obligations by program activity: Construction and Environmental Compliance and Restoration (Direct)	426	688	424
0801	Construction and Environmental Compliance and Restoration (Reimbursable)		30	3(
0900	Total new obligations, unexpired accounts	426	718	454
	Budgetary resources: Unobligated balance:			
1000 1010	Unobligated balance brought forward, Oct 1 Unobligated balance transfer to Exploration [080–0124]	288 -7	335	412
1021	Recoveries of prior year unpaid obligations	19	87	8
1033	Recoveries of prior year paid obligations	1		
1070	Unobligated balance (total)	301	422	499
1100	Appropriation	390	390	42
1100 1120	Appropriation [Disaster Relief Supplemental]		321 -48	
1121	Appropriations transferred to Exploration [080–0124] Appropriations transferred from Science [080–0120]	4	<del>-4</del> 0	
1121	Appropriations transferred from Exploration			
1121	[080-0124]Appropriations transferred from Space Operations	44	25	
	[080-0115]	1		
1160	Appropriation, discretionary (total)	439	688	424
1700	Collected	21	20	30
1900 1930	Budget authority (total)	460 761	708 1,130	454 953
	Memorandum (non-add) entries:		,	
1941	Unexpired unobligated balance, end of year	335	412	499
	Change in obligated balance:			
3000	Unpaid obligations: Unpaid obligations, brought forward, Oct 1	819	826	1,000
3010	New obligations, unexpired accounts	426	718	454
3020	Outlays (gross)	-399	-457	-52
3040 3041	Recoveries of prior year unpaid obligations, unexpired Recoveries of prior year unpaid obligations, expired	$-19 \\ -1$	-87 	-8
3050	Unpaid obligations, end of year	826	1,000	843
2100	Memorandum (non-add) entries:	010	000	1.000
3100 3200	Obligated balance, start of yearObligated balance, end of year	819 826	826 1,000	1,000 843
	Budget authority and outlays, net: Discretionary:			
4000	Budget authority, gross Outlays, gross:	460	708	454
4010	Outlays from new discretionary authority	14	55	29
4011	Outlays from discretionary balances	385	402	495
4020	Outlays, gross (total) Offsets against gross budget authority and outlays:	399	457	524
4033	Offsetting collections (collected) from: Non-Federal sources	-23	-20	-30
4040	Offsets against gross budget authority and outlays (total)	-23	-20	-30
4052	Additional offsets against gross budget authority only: Offsetting collections credited to expired accounts	1		
4053	Recoveries of prior year paid obligations, unexpired accounts	1		
1060		2		
4060	Additional offsets against budget authority only (total)			
4070	Budget authority, net (discretionary)	439	688	424
4080	and the second s	376 439	437 688	494 424
4180				

This appropriation provides for NASA's construction and environmental compliance and restoration activities, and makes available the net proceeds from Enhanced Use Leases, received under the authority of section 20145 of the National Aeronautics and Space Act (51 U.S.C. 20145), for maintenance, capital revitalization, and improvement of real property assets and related personal property at NASA Centers. Performance goals associated with these activities are addressed in NASA's detailed budget request.

Object Classification (in millions of dollars)

Identi	fication code 080-0130-0-1-252	2021 actual	2022 est.	2023 est.
	Direct obligations:			
23.3	Communications, utilities, and miscellaneous charges	2	2	2
25.1	Advisory and assistance services	21	20	21
25.2	Other services from non-Federal sources	68	64	66
25.3	Other goods and services from Federal sources	16	16	16
25.4	Operation and maintenance of facilities	75	292	75
25.5	Research and development contracts	11	11	11
25.7	Operation and maintenance of equipment	3	13	3
26.0	Supplies and materials		13	
31.0	Equipment	1	14	1
32.0	Land and structures	229	243	229
99.0	Direct obligations	426	688	424
99.0	Reimbursable obligations		30	30
99.9	Total new obligations, unexpired accounts	426	718	454

### SPACE OPERATIONS

For necessary expenses, not otherwise provided for, in the conduct and support of space operations research and development activities, including research, development, operations, support and services; space flight, spacecraft control, and communications activities, including operations, production, and services; maintenance and repair, facility planning and design; program management; personnel and related costs, including uniforms or allowances therefor, as authorized by sections 5901 and 5902 of title 5, United States Code; travel expenses; purchase and hire of passenger motor vehicles; and purchase, lease, charter, maintenance, and operation of mission and administrative aircraft, \$4,266,317,000, to remain available until September 30, 2024.

Note.—A full-year 2022 appropriation for this account was not enacted at the time the Budget was prepared; therefore, the Budget assumes this account is operating under the Continuing Appropriations Act, 2022 (Division A of Public Law 117–43, as amended). The amounts included for 2022 reflect the annualized level provided by the continuing resolution.

# Program and Financing (in millions of dollars)

Identif	ication code 080-0115-0-1-252	2021 actual	2022 est.	2023 est.
0001	Obligations by program activity: Space Operations	3,922	3,988	4,266
	Budgetary resources:			
1000	Unobligated balance:	111	000	404
1000 1021	Unobligated balance brought forward, Oct 1	111 113	290 204	494 204
1033	Recoveries of prior year paid obligations	113	204	204
1070	Unobligated balance (total)	225	494	698
	Appropriations, discretionary:			
1100	Appropriation	3,988	3,988	4,266
1120	Appropriations transferred to CECR [080-0130]			
1160	Appropriation, discretionary (total)	3,987	3,988	4,266
1900	Budget authority (total)	3,987		4,266
1930	Total budgetary resources available	4,212	4,482	4,964
	Memorandum (non-add) entries:			
1941	Unexpired unobligated balance, end of year	290	494	698
	Change in obligated balance: Unpaid obligations:			
3000	Unpaid obligations, brought forward, Oct 1	2,346	2,247	2,116
3010	New obligations, unexpired accounts	3,922	3,988	4,266
3011	Obligations ("upward adjustments"), expired accounts	4		
3020	Outlays (gross)	-3,903		-4,143
3040	Recoveries of prior year unpaid obligations, unexpired	-113	-204	-204
3041	Recoveries of prior year unpaid obligations, expired	9		
3050	Unpaid obligations, end of year	2,247	2,116	2,035

	Memorandum (non-add) entries:			
3100	Obligated balance, start of year	2,346	2,247	2,116
3200	Obligated balance, end of year	2,247	2,116	2,035
	Budget authority and outlays, net:			
1000	Discretionary:	0.007	0.000	
4000	Budget authority, gross Outlays, gross:	3,987	3,988	4,266
4010	Outlays from new discretionary authority	2,065	2,273	2,432
4011	Outlays from discretionary balances	1,838	1,642	1,711
4020	Outlays, gross (total)	3,903	3,915	4,143
	Offsets against gross budget authority and outlays: Offsetting collections (collected) from:			
4030	Federal sources	-1		
4033	Non-Federal sources			
4040	Offsets against gross budget authority and outlays (total) Additional offsets against gross budget authority only:	-2		
4052 4053	Offsetting collections credited to expired accounts Recoveries of prior year paid obligations, unexpired	1		
4000	accounts	1	<u></u>	
4060	Additional offsets against budget authority only (total)	2		
4070	Budget authority, net (discretionary)	3,987	3,988	4,266
4080	Outlays, net (discretionary)	3,901	3,915	4,143
4180	Budget authority, net (total)	3,987	3,988	4,266
	Outlays, net (total)	3,901	3,915	4,143

This appropriation provides for the full costs associated with human-related Low Earth Orbit (LEO) and spaceflight operations activities of the Agency. The full costs include all labor, travel, procurement, test, and fabrication costs associated with the research, development, operations, and other general and administrative activities conducted by the programs within this account. Major themes within the Space Operations account include the International Space Station, Space Transportation, Space and Flight Support, Commercial LEO Development, and Exploration Operations. Performance goals associated with these activities are addressed in NASA's detailed budget request.

The International Space Station (ISS) is a complex of research laboratories in LEO where America and its international partners, including Russia, Canada, Europe, and Japan, conduct unique scientific and technological investigations in a microgravity environment. The objective of the International Space Station is to support human space exploration and conduct science experiments and technology development activities unique to the on-orbit attributes of the facility.

The Exploration Operations theme is comprised of the Orion Production and Sustainment Program, SLS Production and Sustainment Program, EGS Production and Sustainment Program and the Exploration Operation Program. The objective of the theme is to build, sustain, and launch the SLS/Orion crew transportation system and plan, train, and fly Artemis missions.

The Space Transportation theme is comprised of the Commercial Crew Program and Crew and Cargo Program, which transport U.S. astronauts and cargo safely back and forth to the ISS and, in the future, to other orbital platforms and destinations. Maintaining the ISS requires a fleet of vehicles and launch locations to transport astronauts, science experiments, supplies, maintenance hardware, and propellant to the ISS, and to dispose of waste generated on the ISS. The Commercial Crew Program partners with two U.S. companies, SpaceX and Boeing, to develop and operate safe, reliable, and affordable crew transportation to LEO. The Crew and Cargo Program purchases cargo transportation services to the ISS through contracts with Northrop Grumman, SpaceX, and Sierra Nevada and purchases crew transportation services from Boeing and SpaceX. Payments to develop and test commercial crew vehicles, and for initial Post Certification Missions for each provider are funded by the Commercial Crew Program, whereas subsequent payments for operational commercial crew missions are funded by the Crew and Cargo Program.

Space and Flight Support is comprised of multiple programs that provide ongoing support for a wide range of services required for safe and successful space mission operations. These programs include Space Communications and Navigation, Communications Services Program, Human Research

Program, Human Space Flight Operations, Launch Services, and Rocket Propulsion Testing. Services are provided to a wide range of customers including NASA, other U.S. Federal agencies, foreign governments, and industry partners.

Commercial LEO Development supports efforts to expand commercial activities in LEO, with a focus on enabling, developing, and deploying commercial platforms that can be used by NASA and other customers and on supporting the growth of private sector activity in LEO.

Object Classification (in millions of dollars)

Identif	ication code 080-0115-0-1-252	2021 actual	2022 est.	2023 est.
	Direct obligations:			
	Personnel compensation:			
11.1	Full-time permanent	281	292	326
11.3	Other than full-time permanent	3	3	3
11.5	Other personnel compensation	2	2	2
11.9	Total personnel compensation	286	297	331
12.1	Civilian personnel benefits	102	104	116
21.0	Travel and transportation of persons	4	14	16
22.0	Transportation of things	1,580	1,607	1,670
23.2	Rental payments to others	1	1	1
23.3	Communications, utilities, and miscellaneous charges	9	9	10
25.1	Advisory and assistance services	115	117	125
25.2	Other services from non-Federal sources	159	162	173
25.3	Other goods and services from Federal sources	49	50	53
25.4	Operation and maintenance of facilities	31	32	34
25.5	Research and development contracts	1,330	1,336	1,458
25.7	Operation and maintenance of equipment	197	200	214
26.0	Supplies and materials	13	13	14
31.0	Equipment	18	18	20
32.0	Land and structures	7	7	8
41.0	Grants, subsidies, and contributions	21	21	23
99.9	Total new obligations, unexpired accounts	3,922	3,988	4,266

Identification code 080-0115-0-1-252	2021 actual	2022 est.	2023 est.
1001 Direct civilian full-time equivalent employment	2,046	1,963	2,259

# OFFICE OF INSPECTOR GENERAL

For necessary expenses of the Office of Inspector General in carrying out the Inspector General Act of 1978, \$48,400,000, to remain available until September 30, 2024.

Note.—A full-year 2022 appropriation for this account was not enacted at the time the Budget was prepared; therefore, the Budget assumes this account is operating under the Continuing Appropriations Act, 2022 (Division A of Public Law 117-43, as amended). The amounts included for 2022 reflect the annualized level provided by the continuing resolution.

# Program and Financing (in millions of dollars)

Identif	ication code 080-0109-0-1-252	2021 actual	2022 est.	2023 est.
0001	Obligations by program activity:	42	44	40
0001	Office of Inspector General (Direct)	43 1	44 2	48
0001	Office of hispector deficial (Keniibursable)			
0900	Total new obligations, unexpired accounts	44	46	50
	Budgetary resources:			
	Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	1		
	Budget authority:			
	Appropriations, discretionary:			
1100	Appropriation	44	44	48
	Spending authority from offsetting collections, discretionary:			
1700	Collected	1	2	2
1900	Budget authority (total)	45	46	50
1930	Total budgetary resources available	46	46	50
	Memorandum (non-add) entries:			
1940	Unobligated balance expiring	-2		
	Change in obligated balance:			
	Unpaid obligations:			
3000	Unpaid obligations, brought forward, Oct 1	6	6	6
3010	New obligations, unexpired accounts	44	46	50

# OFFICE OF INSPECTOR GENERAL—Continued Program and Financing—Continued

Identif	ication code 080-0109-0-1-252	2021 actual	2022 est.	2023 est.
3020	Outlays (gross)	-43	-46	-50
3041	Recoveries of prior year unpaid obligations, expired	-1		
3050	Unpaid obligations, end of year  Memorandum (non-add) entries:	6	6	6
3100	Obligated balance, start of year	6	6	6
3200	Obligated balance, end of year	6	6	6
	Budget authority and outlays, net: Discretionary:			
4000	Budget authority, gross Outlays, gross:	45	46	50
4010	Outlays from new discretionary authority	37	40	44
4011	Outlays from discretionary balances	6	6	6
4020	Outlays, gross (total)	43	46	50
4030	Federal sources	-1	-2	-2
4180	Budget authority, net (total)	44	44	48
4190	Outlays, net (total)	42	44	48

This appropriation provides for the operations of the NASA Office of Inspector General. The mission of the Office of Inspector General is to conduct audits and investigations of agency activities to prevent and detect fraud, waste, abuse, and mismanagement. The Inspector General keeps the NASA Administrator and the Congress informed of problems and deficiencies in agency programs and operations.

# Object Classification (in millions of dollars)

Identifi	cation code 080-0109-0-1-252	2021 actual	2022 est.	2023 est.
	Direct obligations:			
	Personnel compensation:			
11.1	Full-time permanent	24	24	26
11.3	Other than full-time permanent	1	1	1
11.5	Other personnel compensation	1	1	1
11.9	Total personnel compensation	26	26	28
12.1	Civilian personnel benefits	10	10	11
21.0	Travel and transportation of persons		1	1
25.2	Other services from non-Federal sources	4	4	5
31.0	Equipment	3	3	3
99.0	Direct obligations	43	44	48
99.0	Reimbursable obligations	1	2	2
99.9	Total new obligations, unexpired accounts	44	46	50

# **Employment Summary**

Identification code 080-0109-0-1-252	2021 actual	2022 est.	2023 est.
1001 Direct civilian full-time equivalent employment	171	187	190
	7	7	7

#### WORKING CAPITAL FUND

# $\label{eq:program} \textbf{Program and Financing} \ \ (\text{in millions of dollars})$

Identif	ication code 080–4546–0–4–252	2021 actual	2022 est.	2023 est.
0801	Obligations by program activity: Working Capital Fund (Reimbursable)	500	522	379
	Budgetary resources: Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	27	55	56
1021	Recoveries of prior year unpaid obligations	3	6	6
1070	Unobligated balance (total)	30	61	62
	Spending authority from offsetting collections, discretionary:			
1700	Collected	525	517	384
1930	Total budgetary resources available	555	578	446

1941	Memorandum (non-add) entries: Unexpired unobligated balance, end of year	55	56	67
1341	onexpired unobligated barance, end of year	33	J0	
	Change in obligated balance: Unpaid obligations:			
3000	Unpaid obligations, brought forward, Oct 1	242	249	205
3010	New obligations, unexpired accounts	500	522	379
3020	Outlays (gross)	-490	-560	-438
3040	Recoveries of prior year unpaid obligations, unexpired		-6	6
3050	Unpaid obligations, end of year  Memorandum (non-add) entries:	249	205	140
3100	Obligated balance, start of year	242	249	205
3200	Obligated balance, end of year	249	205	140
4000	Budget authority and outlays, net: Discretionary: Budget authority, gross	525	517	384
4000	Outlays, gross:	323	317	304
4010	Outlays from new discretionary authority	238	310	230
4011	Outlays from discretionary balances	252	250	208
4020	Outlays, gross (total)	490	560	438
4030	Federal sources	-494	-472	-339
4033	Non-Federal sources	-31	-45	-45
4040	Offsets against gross budget authority and outlays (total)		<u>-517</u>	
4080	Outlays, net (discretionary)	-35	43	54
4180 4190	Budget authority, net (total)	-35	43	54

The Working Capital Fund provides goods and services on a reimbursable basis. The Fund currently finances four program activities. The first is the Solutions for Enterprise-wide Procurement program, which finances, on an agency-wide basis, scientific and engineering workstation procurement. The second program is the Information Technology Infrastructure Integration Program which consolidates and centralizes management of NASA information technology services in the areas of customer service and ordering, web services and technologies, enterprise business and management applications, integrated network/communications services, end user services, and data center services. The third program, NASA's Shared Services Center, performs selected financial management, human resources, information technology, and procurement services for NASA Headquarters and Centers. The last program, the National Center for Critical Information Processing and Storage, provides Federal customers collocation services with complete redundancy in the electrical distribution system from the national grid to the rack level.

In FY 2023, NASA's existing authority under 51 U.S.C. 30102 would be amended to make the Working Capital Fund available for IT Modernization activities and to transfer amounts from NASA's Safety, Security and Mission Services account into the Working Capital Fund to finance such activities.

### Object Classification (in millions of dollars)

Identi	fication code 080-4546-0-4-252	2021 actual	2022 est.	2023 est.
	Reimbursable obligations:			
	Personnel compensation:			
11.1	Full-time permanent	19	18	18
11.5	Other personnel compensation	1	1	1
11.9	Total personnel compensation	20	19	19
12.1	Civilian personnel benefits	7	6	6
23.2	Rental payments to others	1	1	1
23.3	Communications, utilities, and miscellaneous charges	15	15	10
25.1	Advisory and assistance services	130	178	111
25.2	Other services from non-Federal sources	45	45	30
25.3	Other goods and services from Federal sources	1	1	1
25.4	Operation and maintenance of facilities	22	22	12
25.7	Operation and maintenance of equipment	173	149	123
26.0	Supplies and materials	1	1	1
31.0	Equipment	82	82	62
32.0	Land and structures	3	3	3
99.9	Total new obligations, unexpired accounts	500	522	379

### **Employment Summary**

Identification code 080-4546-0-4-252	2021 actual	2022 est.	2023 est.
2001 Reimbursable civilian full-time equivalent employment	173	169	165

#### Trust Funds

SCIENCE, SPACE, AND TECHNOLOGY EDUCATION TRUST FUND

#### Special and Trust Fund Receipts (in millions of dollars)

Identif	ication code 080-8978-0-7-503	2021 actual	2022 est.	2023 est.
0100	Balance, start of year	16	16	16
1140	Earnings on Investments, Science, Space and Technology Education Trust Fund	1	<u></u>	<u></u>
2000	Total: Balances and receipts	17	16	16
2103	Science, Space, and Technology Education Trust Fund Proposed:	-1		
2201	Science, Space, and Technology Education Trust Fund			
2999	Total appropriations			-16
5099	Balance, end of year	16	16	

#### Program and Financing (in millions of dollars)

16

16

Change in obligated balance:

4190 Outlays, net (total) ...

Identif	fication code 080–8978–0–7–503	2021 actual	2022 est.	2023 est.
0001 0900	Obligations by program activity: Science, Space, and Technology Education Trust Fund Total new obligations, unexpired accounts (object class 41.0)	1	<u></u>	
1000	Budgetary resources: Unobligated balance: Unobligated balance brought forward, Oct 1	1	1	1

	Budget authority:			
	Appropriations, mandatory:			
1203	Appropriation (previously unavailable)(special or trust)	1		
1930	Total budgetary resources available	2	1	
	Memorandum (non-add) entries:			
1941	Unexpired unobligated balance, end of year	1	1	

В	udget authority and outlays, net:		
3020	Outlays (gross)	-1	 
3010	New obligations, unexpired accounts	1	 
	Ulipalu ubligatiolis:		

#### Mandatory: 4090 Budget authority, gross Outlays, gross: 4101 Outlays from mandatory balances ... 4180 Budget authority, net (total) ....

	Memorandum (non-add) entries:			
5000	Total investments, SOY: Federal securities: Par value	15	15	
5001	Total investments, EOY: Federal securities: Par value	15	16	

## Summary of Budget Authority and Outlays (in millions of dollars)

	2021 actual	2022 est.	2023 est.
Enacted/requested:			
Budget Authority	. 1		
Outlays			
Legislative proposal, subject to PAYGO:			
Budget Authority			16
Outlays			16
Total:			
Budget Authority	. 1		16
Outlays	. 1		16

# SCIENCE, SPACE, AND TECHNOLOGY EDUCATION TRUST FUND (Legislative proposal, subject to PAYGO)

### Program and Financing (in millions of dollars)

Identif	ication code 080-8978-4-7-503	2021 actual	2022 est.	2023 est.
0001	Obligations by program activity: Science, Space, and Technology Education Trust Fund		<u></u>	16
0900	Total new obligations, unexpired accounts (object class $41.0$ )			16
	Budgetary resources: Budget authority: Appropriations, mandatory:			
1201	Appropriation (special or trust fund)			16
1930	Total budgetary resources available			16
	Change in obligated balance: Unpaid obligations:			
3010	New obligations, unexpired accounts			16
3020	Outlays (gross)			-16
	Budget authority and outlays, net: Mandatory:			
4090	Budget authority, gross			16
4100	Outlays from new mandatory authority			16
4180	Budget authority, net (total)			16
4190	Outlays, net (total)			16
5001	Memorandum (non-add) entries: Total investments, EOY: Federal securities: Par value			-16

For FY 2023, the Administration will transmit a legislative proposal to provide the remaining balance of the Science, Space, and Technology Education Trust Fund to the Challenger Center for Space Science Education, in combination with repeal of 51 U.S.C. 40901.

#### Administrative Provisions

(INCLUDING TRANSFERS OF FUNDS)

Funds for any announced prize otherwise authorized shall remain available, without fiscal year limitation, until a prize is claimed or the offer is withdrawn.

Not to exceed 5 percent of any appropriation made available for the current fiscal vear for the National Aeronautics and Space Administration in this Act may be transferred between such appropriations, but no such appropriation, except as otherwise specifically provided, shall be increased by more than 10 percent by any such transfers. Any funds transferred to "Construction and Environmental Compliance and Restoration" for construction activities shall not increase that account by more than 20 percent. Balances so transferred shall be merged with and available for the same purposes and the same time period as the appropriations to which transferred. Any transfer pursuant to this provision shall be treated as a reprogramming of funds under section 504 of this Act and shall not be available for obligation except in compliance with the procedures set forth in that section.

Not to exceed 5 percent of any appropriation provided for the National Aeronautics and Space Administration under previous appropriations Acts that remains available for obligation or expenditure in fiscal year 2023 may be transferred between such appropriations, but no such appropriation, except as otherwise specifically provided, shall be increased by more than 10 percent by any such transfers. Any transfer pursuant to this provision shall retain its original availability and shall be treated as a reprogramming of funds under section 504 of this Act and shall not be available for obligation except in compliance with the procedures set forth in that section.

The spending plan required by this Act shall be provided by the National Aeronautics and Space Administration at the theme and program level. The spending plan, as well as any subsequent change of an amount established in that spending plan that meets the notification requirements of section 504 of this Act, shall be treated as a reprogramming under section 504 of this Act and shall not be available for obligation or expenditure except in compliance with the procedures set forth in that

Of the amounts provided for Orion Multi-purpose Crew Vehicle, up to \$718,000,000 may be transferred to Space Operations for Orion Production and Operations consistent with direction provided in the explanatory statement accom1172 Administrative Provisions—Continued THE BUDGET FOR FISCAL YEAR 2023

panying this Act. The authority provided by this paragraph is in addition to the authority provided by the second paragraph under this heading.

Not more than 20 percent or \$25,000,000, whichever is less, of the amounts made available in the current-year CECR appropriation may be applied to CECR projects funded under previous years' CECR appropriation Acts. Use of current-year funds under this provision shall be treated as a reprogramming of funds under section 504 of this act and shall not be available for obligation except in compliance with the procedures set forth in that section.

Section 30102(b) of title 51, United States Code, is amended by:

- (1) Redesignating existing paragraph (3) to (4); and
- (2) Inserting, after paragraph (2), the following:
- (3) INFORMATION TECHNOLOGY (IT) MODERNIZATION.—The fund shall also be available for the purpose of funding IT Modernization activities, as described in section 1077(b)(3)(A)–(E) of Public Law 115–91, on a non-reimbursable basis.

Not to exceed \$18,162,000 made available for the current fiscal year in this Act within "Safety, Security and Mission Services" may be transferred to the Working Capital Fund of the National Aeronautics and Space Administration. Balances so transferred shall be available until expended only for activities described in section

30102(b)(3) of title 51, United States Code, as amended by this Act, and shall remain available until expended. Any transfer pursuant to this provision shall be treated as a reprogramming of funds under section 504 of this Act and shall not be available for obligation except in compliance with the procedures set forth in that section.

### GENERAL FUND RECEIPT ACCOUNTS

(in millions of dollars)

	2021 actual	2022 est.	2023 est.
Offsetting receipts from the public:			
080-322000 All Other General Fund Proprietary Receipts Including			
Budget Clearing Accounts	2	4	4
General Fund Offsetting receipts from the public	2	4	4
Intragovernmental payments: 080-388500 Undistributed Intragovernmental Payments and			
Receivables from Cancelled Accounts	2	2	2
General Fund Intragovernmental payments	2	2	2